

Date: Tuesday, 5/13/2008 9:08:18 AM
 User: Chantal Lavoie

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	SEAL
Job Number :	39182		
Estimate Number :	10085		
P.O. Number :		Part Number :	D31169
This Issue :	5/13/2008	S.O. No. :	
Prsht Rev. :	NC	Drawing Number :	D3116 REVA
First Issue :	//	Project Number :	N/A
Previous Run :	39182	Drawing Revision :	A
	Type :	Material :	
	PURCHASED PARTS	Due Date :	6/30/2008
Written By :		Qty:	500
Checked & Approved By :		Um:	F
Comment :	Est: A: 02.05.15 New Issue NG		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0

PG

PURCHASING



Comment: PURCHASING

Issue P/O: 6350

C 8/08/05/13

500

Seal as per dwg D3116

Possible Supplier: Accurate rubber / Minor rubber P/N ZX1267(replaces P/N ZX1267)

Material release note required

2.0

ZX1267

SEAL



Comment: Qty.: 500.0000 f(s)/Unit Total : 250000.0000 f(s)

Seal ZX1267

3.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect for Transit Damage

Ensure Material Release Note is attached

88 08/07/23

x500

4.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

Check dims to dwg and certification attached

8 08/07/23

x500 ft

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 52408

C 8/23

528

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 5/13/2008 9:08:18 AM
User: Chantal Lavoie

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SEAL

Job Number: 39182

Part Number: D31169

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/07/24

Job Completion



MF 08-07-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN #	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3116	REV. A SHEET 1 OF 1
DATE 02.04.15		TITLE SEAL	SCALE NTS
A	02.04.15	NEW ISSUE	



D3116-1-XXXX SEAL (REPLACES P/N 110-004-2)

WHERE XXXX IS LENGTH IN TENTHS OF INCHES

EG. 87.5" LONG = D3116-1-0875

10" LONG = D3116-1-0100

POSSIBLE SUPPLIER: AERO PRODUCTS COMPONENT SERVICES

P/N: 110-004-2 SEAL

COLOR: BLACK



D3116-3-XXXX SEAL (REPLACES P/N 110-160-1)

WHERE XXXX IS LENGTH IN TENTHS OF INCHES

EG. 87.5" LONG = D3116-3-0875

10" LONG = D3116-3-0100

POSSIBLE SUPPLIER: AERO PRODUCTS COMPONENT SERVICES

P/N: 110-160-1 SEAL

COLOR: WHITE



D3116-5-XXXX SEAL (REPLACES P/N 110-031-4 & 110-031-2)

WHERE XXXX IS LENGTH IN TENTHS OF INCHES

EG. 87.5" LONG = D3116-5-0875

10" LONG = D3116-5-0100

POSSIBLE SUPPLIER: AERO PRODUCTS COMPONENT SERVICES

P/N: 110-031-4 SEAL, BLACK



D3116-7-XXXX SEAL (REPLACES P/N ZX2054)

WHERE XXXX IS LENGTH IN TENTHS OF INCHES

EG. 87.5" LONG = D3116-7-0875

10" LONG = D3116-7-0100

POSSIBLE SUPPLIER: ACCURATE RUBBER/MINOR RUBBER

P/N: ZX2054 SEAL



D3116-9-XXXX SEAL (REPLACES P/N ZX1267)

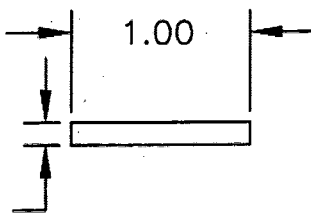
WHERE XXXX IS LENGTH IN TENTHS OF INCHES

EG. 87.5" LONG = D3116-9-0875

10" LONG = D3116-9-0100

POSSIBLE SUPPLIER: ACCURATE RUBBER/MINOR RUBBER

P/N: ZX1267 SEAL



D3116-11-XXXX SEAL

WHERE XXXX IS LENGTH IN TENTHS OF INCHES

EG. 87.5" LONG = D3116-11-0875

10" LONG = D3116-11-0100

POSSIBLE SUPPLIER: LONG HORN INDUSTRIAL SUPPLY

P/N: 100S-1.00x1/8 THICK RED SILICONE TAPE

50 DUROMETER, MEETS MIL-R-5847

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

ALL DIMENSIONS ARE IN INCHES

RELEASED
02.05.06

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 39182

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DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY ONTARIO K6A-1K7 CANADA



QUOTATION 241701

LEVEL 1 Quotation has been changed
DATE May 12, 2008
CUST REF: Verbal
VALID UNTIL: 7/11/08
TERMS: NET 30 DAYS
FOB: ORIGIN "(See Below)"

Customer # 1000369

Minor Rubber Co., Inc.

49 Ackerman Street
Bloomfield, NJ 07003
Phone: (973) 338-6800 Fax: (973) 893-1399

Attn: Chantal
Phone: (613) 632-9577 Fax: (613) 632-1053
Email: clavoie@dartaero.com

QUOTED BY: DeeDee Brave

STANDARD DIMENSIONAL TOLERANCE TABLE - MOLDED RUBBER PRODUCTS DRAWING DESIGNATION "A3" COMMERCIAL

Size (Millimeters)	Fixed	Closure	Size (Inches)	Fixed	Closure
Above Incl.			Above Incl.		
0 - 10	+/- .20	+/- .32	0 - .40	+/- .008	+/- .013
10 - 16	0.25	0.40	.40 - .63	0.010	0.016
16 - 25	0.32	0.50	.63 - 1.00	0.013	0.020
25 - 40	0.40	0.63	1.00 - 1.60	0.016	0.025
40 - 63	0.50	0.80	1.60 - 2.50	0.020	0.032
63 - 100	0.63	1.00	2.50 - 4.00	0.025	0.040
100 - 160	0.80	1.25	4.00 - 6.30	0.032	0.050
160 - & over			6.30 & over		

FIGURE 1

Tolerances for outside (O.D.) diameters, inside (I.D.)
diameters, wall thickness, width, height and general cross
sectional dimensions of extrusions.

Schedule 1
Cros Sectional Tolerances

COMMERCIAL RMA - CLASS 2 - DWG DESIGNATION A2				
0.00 - 0.10*	+/- .013	(0 - 3/32)	0.0 - 2.5*	+/- 0.32
0.10 - 0.16	0.016	(3/32 - 5/32)	2.5 - 4.0	0.40
0.16 - 0.25	0.020	(5/32 - 1/4)	4.0 - 6.3	0.50
0.25 - 0.40	0.025	(1/4 - 13/32)	6.3 - 10.0	0.63
0.40 - 0.63	0.032	(13/32 - 5/8)	10.0 - 16.0	0.80
0.63 - 1.00	0.040	(5/8 - 1)	16.0 - 25.0	1.00

Use +/- 3 - 1/2 % for dimensions over 1.00 inch

Schedule 2
Cros Sectional Tolerances

COMMERCIAL RMA - CLASS 2 - DWG DESIGNATION A2				
0.00 - 0.10*	+/- .018	(0 - 3/32)	0.0 - 2.5*	+/- 0.40
0.10 - 0.16	0.020	(3/32 - 5/32)	2.5 - 4.0	0.50
0.16 - 0.25	0.025	(5/32 - 1/4)	4.0 - 6.3	0.63
0.25 - 0.40	0.030	(1/4 - 13/32)	6.3 - 10.0	0.80
0.40 - 0.63	0.040	(13/32 - 5/8)	10.0 - 16.0	1.00
0.63 - 1.00	0.050	(5/8 - 1)	16.0 - 25.0	1.25

Use +/- 4 - 1/2 % for dimensions over 1.00 inch

Note: There is a relationship between hardness and the amount of tolerance which will be used.

The lower the hardness the more tolerance necessary.

* General cross sectional dimensions below 0.040" (1mm) are impractical.

FIGURE 2

Tolerances for outside (O.D.) diameters, inside (I.D.)
diameters, wall thickness, width, height and general cross
sectional dimensions of extrusions.

RMA Class		2
Drawing Designation		Precision
Dimensions (in Millimeters)		E2
Above	Up to	
0	1.5	+/- 0.25
1.5	2.5	0.35
2.5	4.0	0.40
4.0	6.3	0.50
6.3	10	0.70
10	16	0.80
16	25	1.00
25	40	1.30
40	63	1.60
63	100	2.00
RMA Class		2
Drawing Designation		Precision
Dimensions (in Inches)		E2
Above	Up to	
0	0.06	+/- 0.010
0.06	0.10	0.014
0.10	0.16	0.016
0.16	0.25	0.020
0.25	0.39	0.027
0.39	0.63	0.031
0.63	0.98	0.039
0.98	1.57	0.051
1.57	2.48	0.063
2.48	3.94	0.079

Note: Tolerances on dimensions above 100 mm (3.94) should
be agreed on by supplier and user. General cross sectional
dimensions below 1 mm (0.04) are impractical.
In general, softer materials and those requiring a post cure
need greater tolerance.

FIGURE 3

DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY ONTARIO K6A-1K7 CANADA



QUOTATION

241701

Quotation has been changed

LEVEL 1
DATE May 12, 2008
CUST REF: Verbal
VALID UNTIL: 7/11/08
TERMS: NET 30 DAYS
FOB: ORIGIN "(See Below)"

Customer # 1000369

Minor Rubber Co., Inc.

49 Ackerman Street
Bloomfield, NJ 07003
Phone: (973) 338-6800

Fax: (973) 893-1399

Attn: Chantal
Phone: (613) 632-9577 Fax: (613) 632-1053
Email: clavoie@dartaero.com

QUOTED BY: DeeDee Brave

ITEM	DESCRIPTION	MR PART #	QUANTITY	PRICE / UNIT
1	EPDM Durometer 70 CHOCALATE BR P/N D3116-9 REF* MR Style # ZX-1267 8 FT +/- .250" STRAIGHT LENGTHS DWG SK-22894-MH RMA CLASS 2 SCHEDULE 2 CROSS SECTION TOLERANCES APPLY Country USA This Line Item is subject to +10.00% / -10.00 % variations in Quantity. Delivery 6 To 8 Weeks Quality Notes Exception Notes RMA Class 2 Schedule 1 Commercial Tolerances apply for all cross-sectional dimensions where a lesser tolerance or no tolerance is stated for subject item(s)	380840 - 0	500 1,000	1.71 / Ft 1.54 / Ft

General Notes

SHIPPING: Unless otherwise specified, shipments will be made via UPS or Motorfreight, Collect, against your account number.
F.O.B. Origin (Bloomfield, NJ or Carrollton, TX) at Minor Rubber's option.
Subject to Minor Rubber's standard terms and conditions, available on request.
All Durometers to be Shore 'A' and +/- 5, unless otherwise specified.

May-12-08

04:04pm

From-Minor Rubber Co.



Minor Rubber Co., Inc.

49 Ackerman Street
Bloomfield, NJ 07003
Phone: (973) 338-6800

Fax: (973) 893-1399

Customer# 1000369
MR Vend ID# 1

Attention:

Chantal
Phone: (613) 632-9577
Fax: (613) 632-1053
clavoie@dartaero.com

Order Confirmation

169392

Level 4 Order has been change
Cust PO P000006350
Order Date 5/14/08
Terms Net 30 Days

Page 1 of 1

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DART AEROSPACE
1270 ABERDEEN STREET
HAWKESBURY ONTARIO K6A-1K7 CANADA

B Dart Aerospace
I 1270 ABERDEEN STREET.
L HAWKESBURY ONTARIO K6A-1K7 CANADA
L

SHIP

Dart Aerospace
1270 ABERDEEN STREET
HAWKESBURY ONTARIO K6A-1K7 CANADA

M Dart Aerospace
A 1270 ABERDEEN STREET.
I HAWKESBURY ONTARIO K6A-1K7 CANADA
L Phone: 999 999-99999 Fax: 999 999-99

Item	Description	Cus-Sched	Required	Promised	QTY Ord	Ship Via
1	<p>Cust Line# 1 EPDM Durometer 70 CHOCALATE BROWN</p> <p>MR Part# 380840-0 Cust Part# D3116-9</p> <p>QTY 500 FT Price 1.71 Value \$855.00</p> <p>DWG / REV / EC D3116 / A</p> <p>MR_Style # ZX-1267</p> <p>8 FT +/- .250" STRAIGHT LENGTHS</p> <p>RMA CLASS 2 SCHEDULE 2 CROSS SECTION TOLERANCES APPLY</p> <p>Country USA</p> <p>This Line Item is subject to NO variations in Quantity</p> <p>Quality Notes</p> <p>Exception Notes</p> <p>Quote # 241701 Quote Line 1</p> <p>RMA Class 2 Schedule 1 Commercial Tolerances apply for all cross-sectional dimensions where a lesser tolerance or no tolerance is stated for subject item(s)</p>	1	5/13/08	7/8/08	500	10421

S
08/09/08

Ship Via	Description	Service	Billing Type	FOB
10,421	FEDEX	1 Eco	Coll	Origin

General Notes:

FOB, Origin (Bloomfield, NJ or Carrollton, TX) at Minor Rubber's option.
This Order is Subject to Minor Rubber's standard terms and conditions, available on request.
All Durometers to be Shore 'A' and +/- 5 unless otherwise specified.
Tolerance Exeptions as stated in each associated quote, respectively.